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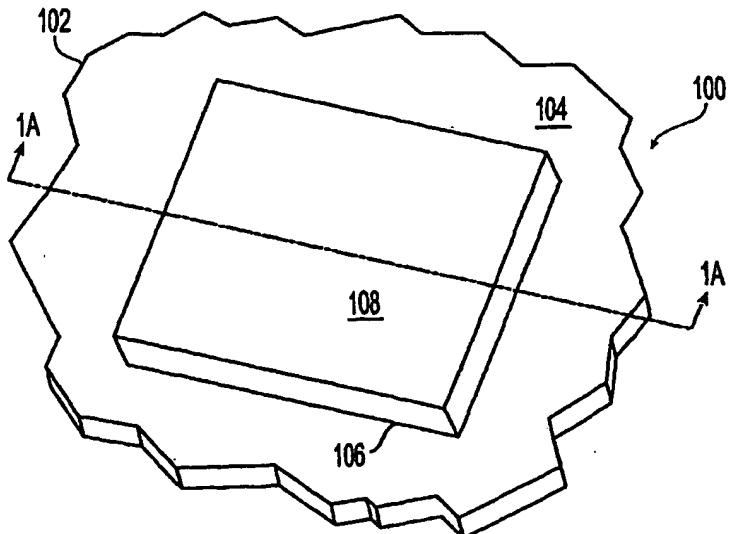
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(54) Title: MICROELECTROMECHANICAL DEVICE WITH MOVING ELEMENT



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(57) Abstract: A microelectromechanical (MEMS) device (100) has a substrate (102) and a generally planar moving element (106), such as a mirror, disposed in parallel to the surface (108) of the substrate. An actuator is operatively engageable with the moving element (106) for selectively actuating the moving element (106) between a first position in a plane horizontal to the surface of the substrate and a second position in that plane. The MEMS device (100) may be effectively used as an optical switch. Various different actuators can be used. Preferably, the device is fabricated using a surface micromachining process.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G02B 26/02
US CL : 359/230, 224; 385/18, 19

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 359/230, 224, 198, 199, 214, 221, 223, 226
385/18, 19, 16, 17, 20-24

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,914,801 A (Dhuler et al.) 22 June 1999 (22/06/99) see figure 1A and cols. 5 and 6	1-38
X,P	US 6,134,042 A (Dhuler et al.) 17 October 2000 (17/10/2000) see figure 1A and cols. 5 and 6	1-38

Further documents are listed in the continuation of Box C. See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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